

Community wide fire ant management at Belterra in Austin, TX

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Belterra is a 1,600 acre community containing around 600 occupied homes as well as walking trails, 12 park areas and a recreation center that includes a playscape and swimming pool. The community also contains an elementary school situated on a 12.5 acre campus. The Belterra community is still in development, but 400 acres are reserved as greenbelts and open spaces and 106 acres are set aside as mixed use to allow for retail locations in the future.

Texas AgriLife Extension Service was approached by Makar Properties to help initiate a community wide fire ant management program. After meeting with representatives, it was decided by the management company to designate a landscape company to be responsible for treating fire ants in greenbelts and common areas while residents would be responsible for treating fire ants on their property.

Over 560 residents have signed up to receive regular emails from the management company. Through this service, residents were sent information on fire ant management, community wide fire ant management and a spring and fall date directing them when to treat their property for fire ants.

Materials and Methods

Sixteen areas throughout the treated community were monitored for fire ant mounds and activity and data was collected. In each selected area, the lid of a 9 dram clear styrene tube containing a hotdog slice was left exposed for at least 45 minutes. After 45 minutes, the hotdog slices were inspected for foraging ants. If ants were present on the hotdog slice, the bait cup was capped and marked with the date and location. Bait cups were frozen, ants were identified and exact numbers recorded at a later time. Each location was monitored for active fire ant mounds and suspected nest or mound sites. Each were disturbed with a stick and counted as active if many (50+) worker ants were observed to emerge.

Four counts were taken in 2009- pre and post-baiting in both the spring and the fall. Community wide fire ant management days, or “Ant Out” days, were held on May 2, 2009 and October 10, 2009. Residents were responsible for treating their property for fire ants using the method and/ or product of their choice.

Monitored areas varied in size. The square footage of the areas was recorded and mound numbers adjusted to mounds per 1000 square feet so a true comparison could be made.

Results & Discussion

Monitored areas showed a decrease in fire ant mounds after treatment days held in May and October (Fig 1). Foraging fire ant numbers showed a slight decrease at the post-bait check after the spring baiting. Foraging fire ant numbers increased before the fall baiting and then numbers of foraging fire ants decreased at the post-check after the

fall baiting, but this could be due to winter temperatures and ants not being as active during December (Fig 2).

Figure 1. Mean number of mounds of red imported fire ants found in selected areas of Belterra, Austin, TX during 2009 community wide fire ant management project.

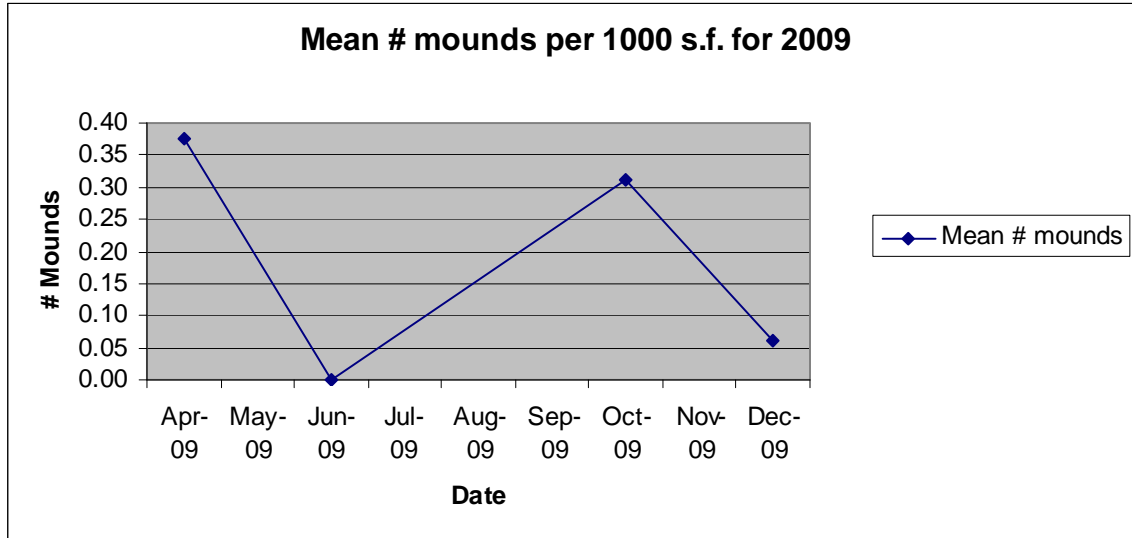
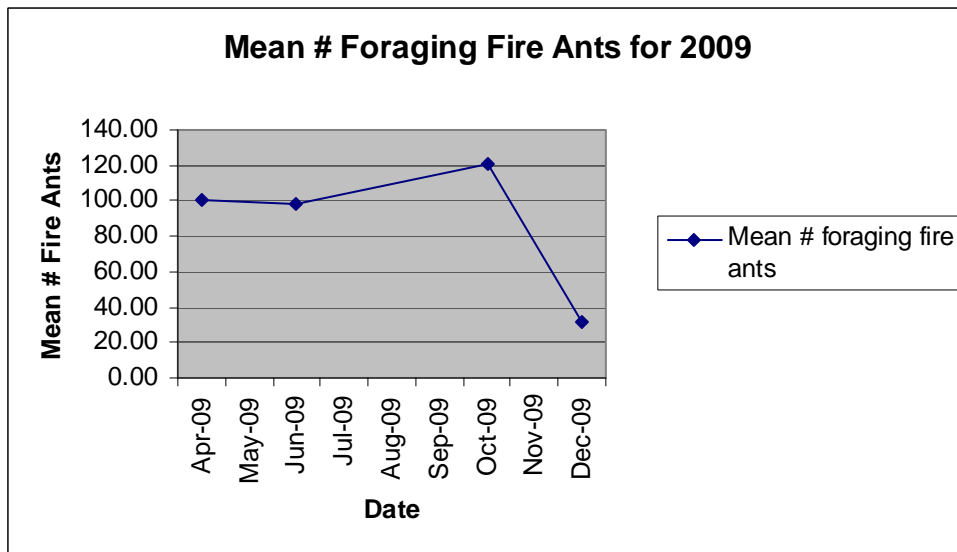


Figure 2. Mean number of foraging red imported fire ants found in selected areas of Belterra, Austin, TX during 2009 community wide fire ant management project.



Community wide fire ant management programs are a way for neighborhoods to reduce fire ant populations within their community. The Belterra approach allows residents to choose the method and product that they want to utilize for fire ant treatment which allows for differences of opinion.

Acknowledgements

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